

ABSTRACT OF THE DISCLOSURE

A field emission cold cathode device of a lateral type includes a cathode electrode and gate electrode disposed on a major surface of a support substrate laterally side by side. The cathode electrode and gate electrode have side surfaces which oppose each other, and an emitter is disposed on the opposite side surface of the cathode electrode. The emitter includes a metal plating layer formed on the cathode electrode, and a plurality of granular or rod-shaped micro-bodies. The micro-bodies are consisting essentially of a material selected from the group consisting of fullerenes, carbon nanotubes, graphite, a material with a low work function, a material with a negative electron affinity, and a metal material, and are supported in the metal plating layer in a dispersed state.